



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,053	01/08/2001	Christophe Bertez	S.5229 US - OP/MM	6760

466 7590 01/03/2002

YOUNG & THOMPSON
745 SOUTH 23RD STREET 2ND FLOOR
ARLINGTON, VA 22202

EXAMINER

JOHNSON, JONATHAN J

ART UNIT	PAPER NUMBER
----------	--------------

1725

DATE MAILED: 01/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

MF=9

Office Action Summary	Application No.	Applicant(s)	
	09/755,053	BERTEZ ET AL.	
	Examiner	Art Unit	
	Jonathan Johnson	1725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>6</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claims 1-6, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. For purposes of prosecution, the examiner will examine the preferred portion of the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-5 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Matubara et al. (5,618,452). With respect to Claim 1, Matubara et al. teaches a method of cutting a workpiece made of steel (Column 2, Lines 40-58) by the use of at least one transparent or reflecting optical means for focusing at least one laser beam and of at least one assist gas for said laser beam, in which the optical means is of the multifocus type and the assist gas is oxygen or an oxygen/nitrogen mixture (Abstract, Claim 3, and Column 5, Lines 45-55).

With respect to Claim 2, the teachings of Matubara et al. are the same as relied upon in the rejection of Claim 1. Matubara et al. teaches the multifocus optical means is chosen from a bifocal lens (Claim 3).

With respect to Claim 3, the teachings of Matubara et al. are the same as relied upon in the rejection of Claim 1. Matubara et al. teaches the nitrogen/oxygen mixture is between 92 and 98% nitrogen (Column 4, Lines 5-20).

With respect to Claim 4, the teachings of Matubara et al. are the same as relied upon in the rejection of Claim 1. Matubara et al. teaches the assist gas contains less than 500 ppm by volume of argon (Column 4, Lines 4-20).

With respect to Claim 5, the teachings of Matubara et al. are the same as relied upon in the rejection of Claim 1. Matubara et al. teaches an oxygen content of 5% volume and the rest nitrogen (Column 4, Lines 4-20).

With respect to Claim 8, the teachings of Matubara et al. are the same as relied upon in the rejection of Claim 1. Matubara et al. teaches the workpiece is chosen from plates (Column 2, Line 47).

Claims 1 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Nagahori et al. (6,316,743). Nagahori et al. teaches a method of cutting a workpiece made of steel (Column 1, Line 19) by the use of at least one transparent or reflecting optical means for focusing at least one laser beam and of at least one assist gas for said laser beam, in which the optical means is of the multifocus type and the assist gas is oxygen or an oxygen/nitrogen mixture (abstract; Column 7, Lines 1-20 and Figure 1, Item 13); and having one focusing point positioned near the upper surface of the workpiece and a second focusing point positioned near the lower surface of the workpiece (Column 9, Lines 15-35 and Figure 1, Item D).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matubara et al. (5,618,452) as applied to Claim 1 above. Matubara et al. teaches increasing the thickness of the steel sheets (Column 2, Lines 35-45). The subject matter as a whole would have been obvious to

Art Unit: 1725

one of ordinary skill in the art at the time the invention was made to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be a prima facie case of obviousness to select a value in a known range by optimization for the best results. In re Aller, 105 USPQ 233.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matubara et al. (5,618,452) as applied to Claim 1 above and further in view of McNeill (4,781,907). McNeill teaches a nitrogen/oxygen mixture obtained from air treated by a membrane system (Column 1, Line 40 through Column 2, Line 65). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the separation technique of Matubara et al. to utilize the membrane system in order to achieve a relatively pure nitrogen stream (see McNeill Column 1, Lines 40-47).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Johnson whose telephone number is 703-308-0667.

The examiner can normally be reached on M-Th 7AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on 703-308-3318. The fax phone numbers for the


Application/Control Number: 09/755,053


Page 6

Art Unit: 1725

organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

jj 
December 28, 2001


TOM DUNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700